

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

**SAINT LAWRENCE COMMUNICATIONS
LLC,**

Plaintiff,

V.

**APPLE INC., AT&T MOBILITY LLC,
and CELCO PARTNERSHIP D/B/A
VERIZON WIRELESS**

Defendants.

[illegible]

Case No. 2:16-cv-00082

Jury Trial Requested

**DEFENDANT APPLE INC.'S ANSWER, DEFENSES, AND COUNTERCLAIMS TO
PLAINTIFF SAINT LAWRENCE COMMUNICATIONS LLC'S COMPLAINT FOR
PATENT INFRINGEMENT**

Defendant Apple Inc. (“Apple”) answers Plaintiff Saint Lawrence Communications LLC’s (“SLC”) Complaint for Patent Infringement (“Complaint”) against Apple, AT&T Mobility LLC (“AT&T”), Cellco Partnership d/b/a Verizon Wireless (“Verizon”) (collectively, “Defendants”) as follows. SLC’s opening paragraph does not itself appear to contain any allegations requiring a response. Apple admits that SLC’s pleading purports to be a complaint, but denies Apple has infringed any valid and enforceable patent claim or that SLC is entitled to any relief. Apple’s specific responses to the numbered allegations are set forth below.

THE PARTIES

1. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 1, and therefore denies them.

2. Apple admits that it is a corporation organized and existing under the laws of California with its principal place of business at 1 Infinite Loop, Cupertino, California 95014.

3. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 3, and therefore denies them.

4. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 4, and therefore denies them.

JURISDICTION AND VENUE

5. Apple admits that this Court has subject matter jurisdiction over patent law claims. Consistent with denial of the allegations in paragraphs 22, 31, 40, 49, and 58 below, on information and belief, Apple is without knowledge or information sufficient to form a belief as to whether this Court has subject matter jurisdiction over SLC's patent claims in this particular case and denies any remaining allegations of paragraph 5.

6. Apple admits that it has conducted business in the Eastern District of Texas. Apple denies any remaining allegations of paragraph 6.

SUMMARY

7. For avoidance of doubt and consistent with denial of the allegations in paragraphs 22, 31, 40, 49, and 58 below, Apple denies that the patents originating from VoiceAge Corporation ("VoiceAge") and asserted by SLC in this Action are valid or infringed. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 7, and therefore denies them.

8. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 8, and therefore denies them.

9. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 9, and therefore denies them.

10. Apple admits that the Adaptive Multi-Rate-Wideband ("AMR-WB") is codified as an international standard, including as G.722.2, which was promulgated as a standard speech

codec by the ITU Telecommunication Standardization Sector (“ITU-T”) as the “Wideband coding of speech at around 16 kbits/s using Adaptive Multi-Rate Wideband (AMR-WB).” Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 10, and therefore denies them.

11. For avoidance of doubt and consistent with denial of the allegations in paragraphs 22, 31, 40, 49, and 58 below, Apple denies that the patents originating with VoiceAge and asserted by SLC in this Action are valid or infringed. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 11, and therefore denies them.

12. For avoidance of doubt and consistent with denial of the allegations in paragraphs 22, 31, 40, 49, and 58 below, Apple denies that the patents originating with VoiceAge and asserted by SLC in this Action are valid or infringed. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 12, and therefore denies them.

13. For avoidance of doubt and consistent with denial of the allegations in paragraphs 22, 31, 40, 49, and 58 below, Apple denies that the patents originating with VoiceAge and asserted by SLC in this Action are valid or infringed. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 13, and therefore denies them.

14. For avoidance of doubt and consistent with denial of the allegations in paragraphs 22, 31, 40, 49, and 58 below, Apple denies that the patents originating with VoiceAge and asserted by SLC in this Action are valid or infringed. Apple is without knowledge or information

sufficient to form a belief as to the truth of the remaining allegations of paragraph 14, and therefore denies them.

15. Apple is without knowledge or information sufficient to form a belief as to the truth of the allegations of paragraph 15, and therefore denies them.

16. Apple admits that a representative of SLC' had discussions with Jeff Risher of Apple in the Summer of 2014. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 16, and therefore denies the remaining allegations of paragraph 16.

17. To the extent the allegations of paragraph 17 are directed to Apple, Apple admits that it is, or is affiliated with, a member organization of the 3rd Generation Partnership Project ("3GPP"). Apple further admits that 3GPP solicits identification of standards essential patents. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 17, and therefore denies them.

18. To the extent the allegations of paragraph 18 are directed to Apple, Apple denies them. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 18, and therefore denies them.

19. To the extent the allegations of paragraph 19 are directed to Apple, Apple denies them. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 19, and therefore denies them.

20. To the extent the allegations of paragraph 19 are directed to Apple, Apple denies them. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 20, and therefore denies them.

21. To the extent the allegations of paragraph 21 are directed to Apple, Apple denies them. Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 21, and therefore denies them.

COUNT I: INFRINGEMENT OF U.S. PATENT NO. 6,795,805

22. Apple admits that the face of U.S. Patent No. 6,795,805 (“the ’805 patent”) bears an issuance date of September 21, 2004 but denies that it was duly and legally issued after a full and fair examination. Apple admits that the ’805 patent is entitled “Periodicity Enhancement in Decoding Wideband Signals.” Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 22, and therefore denies them.

23. Apple admits that the Apple iPhone 6, Apple iPhone 6 Plus, Apple iPhone 6S, and Apple iPhone 6S Plus are offered for sale in the United States. To the extent the remaining allegations of paragraph 23 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 23 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’805 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 23, and therefore denies them.

24. Apple denies the allegations of paragraph 24.

25. To the extent the allegations of paragraph 25 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 25 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’805 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 25, and therefore denies them.

26. To the extent the allegations of paragraph 26 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 26 are directed to other entities, Apple denies

their actions in connection with Apple devices infringe the '805 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 26, and therefore denies them.

27. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on AT&T networks. Apple denies that it infringes the '805 patent. To the extent the remaining allegations of paragraph 27 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 27 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '805 patent

28. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on Verizon networks. Apple denies that it infringes the '805 patent. To the extent the remaining allegations of paragraph 28 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 28 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '805 patent

29. To the extent the allegations of paragraph 29 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 29 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '805 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 29, and therefore denies them.

30. To the extent the allegations of paragraph 30 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 30 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '805 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 30, and therefore denies them.

COUNT II: INFRINGEMENT OF U.S. PATENT NO. 6,807,524

31. Apple admits that the face of U.S. Patent No. 6,807,524 (“the ’524 patent”) bears an issuance date of October 19, 2004 but denies that it was duly and legally issued after a full and fair examination. Apple admits that the ’524 patent is entitled “Perpetual Weighting Device and Method for Efficient Coding of Wideband Signals.” Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 31, and therefore denies them.

32. Apple admits that the Apple iPhone 6, Apple iPhone 6 Plus, Apple iPhone 6S, and Apple iPhone 6S Plus are offered for sale in the United States. To the extent the remaining allegations of paragraph 32 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 32 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’524 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 32, and therefore denies them.

33. Apple denies the allegations of paragraph 33.

34. To the extent the allegations of paragraph 34 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 34 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’524 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 34, and therefore denies them.

35. To the extent the allegations of paragraph 35 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 35 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’524 patent. Apple is without

knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 35, and therefore denies them.

36. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on AT&T networks. Apple denies that it infringes the '524 patent. To the extent the remaining allegations of paragraph 36 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 36 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '524 patent

37. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on Verizon networks. Apple denies that it infringes the '524 patent. To the extent the remaining allegations of paragraph 37 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 37 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '524 patent

38. To the extent the allegations of paragraph 38 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 38 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '524 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 38, and therefore denies them.

39. To the extent the allegations of paragraph 39 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 39 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '524 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 39, and therefore denies them.

COUNT III: INFRINGEMENT OF U.S. PATENT NO. 7,151,802

40. Apple admits that the face of U.S. Patent No. 7,151,802 (“the ’802 patent”) bears an issuance date of December 19, 2006 but denies that it was duly and legally issued after a full and fair examination. Apple admits that the ’802 patent is entitled “High Frequency Content Recovering Method and Device for Over-Sampled Synthesized Wideband Signal.” Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 40, and therefore denies them.

41. Apple admits that the Apple iPhone 6, Apple iPhone 6 Plus, Apple iPhone 6S, and Apple iPhone 6S Plus are offered for sale in the United States. To the extent the remaining allegations of paragraph 41 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 41 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’802 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 41, and therefore denies them.

42. Apple denies the allegations of paragraph 42.

43. To the extent the allegations of paragraph 43 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 43 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’802 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 43, and therefore denies them.

44. To the extent the allegations of paragraph 44 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 44 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’802 patent. Apple is without

knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 44, and therefore denies them.

45. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on AT&T networks. Apple denies that it infringes the '802 patent. To the extent the remaining allegations of paragraph 45 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 45 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '802 patent

46. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on Verizon networks. Apple denies that it infringes the '802 patent. To the extent the remaining allegations of paragraph 46 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 46 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '802 patent

47. To the extent the allegations of paragraph 47 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 47 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '802 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 47, and therefore denies them.

48. To the extent the allegations of paragraph 48 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 48 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '802 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 48, and therefore denies them.

COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 7,260,521

49. Apple admits that the face of U.S. Patent No. 7,260,251 (“the ’521 patent”) bears an issuance date of August 21, 2007 but denies that it was duly and legally issued after a full and fair examination. Apple admits that the ’521 patent is entitled “Method and Device for Adaptive Bandwidth Pitch Search in Coding Wideband Signals.” Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 49, and therefore denies them.

50. Apple admits that the Apple iPhone 6, Apple iPhone 6 Plus, Apple iPhone 6S, and Apple iPhone 6S Plus are offered for sale in the United States. To the extent the remaining allegations of paragraph 50 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 50 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’521 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 50, and therefore denies them.

51. Apple denies the allegations of paragraph 51.

52. To the extent the allegations of paragraph 52 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 52 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’521 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 52, and therefore denies them.

53. To the extent the allegations of paragraph 53 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 53 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’521 patent. Apple is without

knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 53, and therefore denies them.

54. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on AT&T networks. Apple denies that it infringes the '802 patent. To the extent the remaining allegations of paragraph 54 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 54 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '521 patent.

55. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on Verizon networks. Apple denies that it infringes the '802 patent. To the extent the remaining allegations of paragraph 55 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 55 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '521 patent.

56. To the extent the allegations of paragraph 56 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 56 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '521 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 56, and therefore denies them.

57. To the extent the allegations of paragraph 57 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 57 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '521 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 57, and therefore denies them.

COUNT V: INFRINGEMENT OF U.S. PATENT NO. 7,191,123

58. Apple admits that the face of U.S. Patent No. 7,191,123 (“the ’123 patent”) bears an issuance date of March 13, 2007 but denies that it was duly and legally issued after a full and fair examination. Apple admits that the ’123 patent is entitled “Gain-Smoothing in Wideband Speech and Audio Signal Decoder.” Apple is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations of paragraph 58, and therefore denies them.

59. Apple admits that the Apple iPhone 6, Apple iPhone 6 Plus, Apple iPhone 6S, and Apple iPhone 6S Plus are offered for sale in the United States. To the extent the remaining allegations of paragraph 59 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 59 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’123 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 59, and therefore denies them.

60. Apple denies the allegations of paragraph 60.

61. To the extent the allegations of paragraph 61 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 61 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’123 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 61, and therefore denies them.

62. To the extent the allegations of paragraph 62 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 62 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the ’123 patent. Apple is without

knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 62, and therefore denies them.

63. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on AT&T networks. Apple denies that it infringes the '123 patent. To the extent the remaining allegations of paragraph 63 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 63 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '123 patent.

64. Apple admits that it tests, makes, uses, offers for sale, sells, and/or imports devices for use on Verizon networks. Apple denies that it infringes the '123 patent. To the extent the remaining allegations of paragraph 64 are directed to Apple, Apple denies them. To the extent the remaining allegations of paragraph 64 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '123 patent.

65. To the extent the allegations of paragraph 65 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 65 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '123 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 65, and therefore denies them.

66. To the extent the allegations of paragraph 66 are directed to Apple, Apple denies them. To the extent the allegations of paragraph 66 are directed to other entities, Apple denies their actions in connection with Apple devices infringe the '123 patent. Apple is without knowledge or information sufficient to form a belief as to the truth of any remaining allegations of paragraph 66, and therefore denies them.

JURY DEMAND

67. This paragraph sets forth SLC's request for a jury trial to which no response is required.

PRAYER FOR RELIEF

These paragraphs set forth the statement of relief requested by SLC to which no response is required. Apple denies that SLC is entitled to any relief and specifically denies all the allegations and prayers for relief contained in paragraphs (a) through (e) of SLC's prayer for relief.

DENIAL OF ANY REMAINING ALLEGATIONS

Except as specifically admitted herein, Apple denies any remaining allegations, including those included in any footnotes, in SLC's Complaint.

DEFENSES

Subject to the responses above, Apple alleges and asserts the following defenses in response to the allegations, without admitting or acknowledging that Apple bears the burden of proof as to any of them or that any must be pleaded as defenses. Apple specifically reserves all rights to allege additional defenses that become known through the course of discovery.

FIRST DEFENSE **(No Infringement)**

68. Apple does not infringe, any valid and enforceable claim of the '805, '524, '802, '521, and '123 patents, in any manner under 35 U.S.C. § 271(a), (b), (c), and/or (f), willfully or otherwise. Apple has not performed any act and is not proposing to perform any act in violation of any rights validly belonging to SLC.

69. Apple does not indirectly infringe any asserted claim and, in particular, does not induce any third party to perform all of the required steps of any asserted method claims while using any of the accused products.

70. Apple does not supply any component that contributes to infringement of any valid claim.

SECOND DEFENSE
(Invalidity)

71. The asserted claims of the '805, '524, '802, '521, and '123 patents are invalid for failure to satisfy the requirements of 35 U.S.C. § 100, *et seq.*, including, but not limited to, one or more of the following: 35 U.S.C. §§ 101, 102, 103, and/or 112.

72. As a first example, the asserted claims of each patent are directed to abstract ideas, rendering them invalid under 35 U.S.C. § 101.

73. As a second example, one or more individual prior art references discloses all limitations of one or more of the asserted claims of the '805, '524, '802, '521, and '123 patents, rendering one or more of them invalid as anticipated under 35 U.S.C. § 102.

74. As a third example, combinations of prior art references disclose all of the limitations of each of the '805, '524, '802, '521, and '123 patents' asserted claims, and a person of ordinary skill in the art at the time each of the '805, '524, '802, '521, and '123 patents was filed, respectively, would have been motivated to combine those prior art references to achieve the subject matter recited in each asserted claim, rendering the '805, '524, '802, '521, and '123 patents' asserted claims invalid as obvious in view of the prior art under 35 U.S.C. § 103.

THIRD DEFENSE
(Laches, Estoppel, Unclean Hands)

75. The claims of the '805, '524, '802, '521, and '123 patents are unenforceable as asserted, in whole or in part, by laches, estoppel, and/or unclean hands.

FOURTH DEFENSE
(Notice, Damages, and Costs)

76. SLC's claims for damages are statutorily limited under 35 U.S.C. §§ 286 and 287.

77. SLC is barred from recovering costs in connection with this action under 35 U.S.C. § 288.

78. SLC's claims for relief are limited by the doctrines of full compensation, exhaustion, and/or first sale, and SLC is not entitled to a double recovery.

FIFTH DEFENSE
(License, Patent Exhaustion)

79. SLC's claims for relief are barred in whole or in part by express or implied license or patent exhaustion.

80. SLC's claims for patent infringement are precluded in whole or in part to the extent that any allegedly infringing products, components thereof, or steps are supplied, directly or indirectly, to Apple or are imported, sold by, offered for sale by, made by, or made for, or performed by any entity or entities having an express or implied license to the '805, '524, '802, '521, and '123 patents.

SIXTH DEFENSE
(Prosecution History Estoppel)

81. SLC's claims are barred by the doctrine of prosecution history estoppel based on statements, representations, and admissions made during the prosecution of the patent applications resulting in the '805, '524, '802, '521, and '123 patents before the United States Patent and Trademark Office and/or during the prosecution of related patent applications.

SEVENTH DEFENSE
(Lack of Standing)

82. SLC lacks standing to pursue some or all of its claims against Apple.

83. On information and belief, the Universite de Sherbrooke filed Canadian Patent Application No. 22252170 (“the ’170 application”) on October 27, 1998 and identified itself as the owner of the purported invention. Each of the ’805, ’524, ’802, and ’521 patents on its face states that it claims priority to the ’170 application. On information and belief, subject to further discovery, the Universite de Sherbrooke owns some or all rights in at least the asserted ’805, ’524, ’802, and ’521 patents. As a result, SLC does not own all the rights in at least the ’805, ’524, ’802, and ’521 patents, and therefore lacks standing to pursue its claims for infringement of those patents.

RESERVATION OF DEFENSES

Apple hereby reserves the right to supplement defenses as discovery proceeds in this case.

COUNTERCLAIMS

Without waiver of any rights, Apple, for its Counterclaims against SLC and upon information and belief, states as follows:

THE PARTIES

1. Apple Inc. (“Apple”) is a California corporation organized and existing under the laws of the State of California with its principle place of business at 1 Infinite Loop, Cupertino, California 95014.

2. On information and belief, Plaintiff Saint Lawrence Communications (“SLC”) is a Texas limited liability company with its principal place of business in Plano, Texas.

JURISDICTION AND VENUE

3. Subject to Apple’s defenses and denials, Apple alleges that this Court has jurisdiction over the subject matter of these Counterclaims under, without limitation, 28 U.S.C. §§ 1331, 1338(a), 1367, 2201, and 2202.

4. SLC has consented to personal jurisdiction by commencing this action for patent infringement in this judicial jurisdiction, as set forth in SLC's Complaint.

5. SLC has alleged that venue is proper in the Eastern District of Texas for the purposes of this particular action, pursuant to 28 U.S.C. § 1391. To the extent that venue is found to be proper over SLC's claims in this District, SLC has also consented that venue is permissible in this District pursuant to at least 28 U.S.C. §§ 1391(c) and 1400 for these Counterclaims.

FACTUAL BACKGROUND

6. Apple restates and incorporates by reference the allegations in paragraphs 68 through 83 above (Defenses) as if set forth fully herein.

7. In its Complaint, SLC asserts that Apple has infringed U.S. Patent Nos. 6,795,805 (the "'805 patent"), 6,807,524 (the "'524 patent"), 7,151,802 (the "'802 patent"), 7,260,521 (the "'521 patent), and 7,191,123 (the "'123 patent").

8. The '805, '524, '802, '521, and '123 patents are invalid, unenforceable, and/or are not infringed by Apple, directly or indirectly.

9. Consequently, there is an actual case or controversy between the parties over the non-infringement, invalidity, and/or unenforceability of the '805, '524, '802, '521, and '123 patents.

FIRST COUNTERCLAIM **(Declaratory Judgment of Non-Infringement of U.S. Patent No. 6,795,805)**

10. Apple restates and incorporates by reference its allegations in paragraphs 1 through 9 of its Counterclaims above, as if set forth fully herein.

11. An actual case or controversy exists between Apple and SLC as to whether the '805 patent is not infringed by Apple.

12. Apple has not infringed and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the '805 patent. By way of example and without limitation, Apple does not infringe at least claim 1 of the '805 patent because none of the Apple accused products include “[a] device for enhancing periodicity of an excitation signal produced in relation to a pitch codevector and an innovative codevector for supplying a signal synthesis filter in view of synthesizing a wideband speech signal” or “an innovation filter for filtering the innovative codevector in relation to said periodicity factor to thereby reduce energy of a low frequency portion of the innovative codevector and enhance periodicity of a low frequency portion of the excitation signal,” as claimed.

13. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '805 patent.

SECOND COUNTERCLAIM
(Declaratory Judgment of Invalidity of U.S. Patent No. 6,795,805)

14. Apple restates and incorporates by reference its allegations in paragraphs 1 through 13 of its Counterclaims above, as if set forth fully herein.

15. An actual case or controversy exists between Apple and SLC as to whether the '805 patent is invalid.

16. The claims of the '805 patent are invalid for failure to satisfy one or more of the requirements of 35 U.S.C. § 1 *et seq.*, including, but not limited to §§ 101, 102, 103, and 112. By way of example and without limitation, U.S. Patent No. 5,719,993, alone or in combination with other prior art, makes obvious the methods and systems claimed in the '805 patent by disclosing each of the claimed elements, including, for example and without limitation, “a factor generator for calculating a periodicity factor related to the wideband speech signal;” and “an innovation filter for filtering the innovative codevector in relation to said periodicity factor to

thereby reduce energy of a low frequency portion of the innovative codevector and enhance periodicity of a low frequency portion of the excitation signal.” Further, the claims of the ’805 patent, including claim 1, are invalid under Section 112 for being indefinite because, for example and without limitation, the specification fails to disclose or sufficiently describe structure for performing several claim limitations that are governed by 35 U.S.C. § 112 ¶ 6, including for example, the claimed “device for enhancing periodicity of an excitation signal produced in relation to a pitch codevector.”

17. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights as to whether the ’805 patent is invalid.

THIRD COUNTERCLAIM
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 6,807,524)

18. Apple restates and incorporates by reference its allegations in paragraphs 1 through 17 of its Counterclaims above, as if set forth fully herein.

19. An actual case or controversy exists between Apple and SLC as to whether the ’524 patent is not infringed by Apple.

20. Apple has not infringed and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the ’524 patent. By way of example and without limitation, Defendants do not infringe at least claim 1 of the ’524 patent because none of the Apple accused products include a “perceptual weighting device for producing a perceptually weighted signal in response to a wideband speech signal in order to reduce a difference between the wideband speech signal and a subsequently synthesized wideband speech signal” or a “signal preemphasis filter responsive to the wideband speech signal for enhancing a high frequency content of the wideband speech signal,” as claimed.

21. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '524 patent.

FOURTH COUNTERCLAIM
(Declaratory Judgment of Invalidity of U.S. Patent No. 6,807,524)

22. Apple restates and incorporates by reference its allegations in paragraphs 1 through 21 of its Counterclaims above, as if set forth fully herein.

23. An actual case or controversy exists between Apple and SLC as to whether the '524 patent is invalid.

24. The claims of the '524 patent are invalid for failure to satisfy one or more of the requirements of 35 U.S.C. § 1 *et seq.*, including, but not limited to §§ 101, 102, 103, and 112. By way of example and without limitation, U.S. Patent No. 5,295,224, alone or in combination with other prior art, makes obvious the methods and systems claimed in the '524 patent by disclosing each of the claimed elements, including, for example and without limitation, “a signal preemphasis filter responsive to the wideband speech signal for enhancing a high frequency content of the wideband speech signal to thereby produce a preemphasised signal”; “a synthesis filter calculator responsive to said preemphasised signal for producing synthesis filter coefficients”; and “a perceptual weighting filter, responsive to said preemphasised signal and said synthesis filter coefficients, for filtering said preemphasised signal in relation to said synthesis filter coefficients to thereby produce said perceptually weighted signal, said perceptual weighting filter having a transfer function with fixed denominator whereby weighting of said wideband speech signal in a formant region is substantially decoupled from a spectral tilt of said wideband speech signal.” Further, the claims of the '524 patent, including claim 1, are invalid under Section 112 for being indefinite because, for example and without limitation, the specification fails to disclose or sufficiently describe structure for performing several claim

limitations that are governed by 35 U.S.C. § 112 ¶ 6, including for example, the claimed “perceptual weighting device for producing a perceptually weighted signal in response to a wideband speech signal.”

25. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights as to whether the ’524 patent is invalid.

FIFTH COUNTERCLAIM
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 7,151,802)

26. Apple restates and incorporates by reference its allegations in paragraphs 1 through 25 of its Counterclaims above, as if set forth fully herein.

27. An actual case or controversy exists between Apple and SLC as to whether the ’802 patent is not infringed by Apple.

28. Apple has not infringed and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the ’802 patent. By way of example and without limitation, Apple does not infringe at least claim 1 of the ’802 patent because none of the Apple accused products include a “random noise generator for producing a noise sequence having a given spectrum” or a “signal fragmenting device for receiving an encoded version of a wideband signal,” as claimed.

29. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the ’802 patent.

SIXTH COUNTERCLAIM
(Declaratory Judgment of Invalidity of U.S. Patent No. 7,151,802)

30. Apple restates and incorporates by reference its allegations in paragraphs 1 through 29 of its Counterclaims above, as if set forth fully herein.

31. An actual case or controversy exists between Apple and SLC as to whether the '802 patent is invalid.

32. The claims of the '802 patent are invalid for failure to satisfy one or more of the requirements of 35 U.S.C. § 1 *et seq.*, including, but not limited to §§ 101, 102, 103, 112, and 132. By way of example and without limitation, Japanese Patent App. No. 8-123495 and/or the printed publication titled G.729, "Coding of Speech at 8 kbit/s Using Conjugate-Structure Algebraic-Code-Excited Linear Prediction (CD-ACELP)," alone or in combination with other prior art, makes obvious the methods and systems claimed in the '802 patent by disclosing each of the claimed elements, including, for example and without limitation, "a signal fragmenting device for receiving an encoded version of a wideband signal previously down-sampled during encoding and extracting from said encoded wideband signal version at least pitch codebook parameters, innovative codebook parameters, and linear prediction filter coefficients"; "a pitch codebook responsive to said pitch codebook parameters for producing a pitch codevector"; "an innovative codebook responsive to said innovative codebook parameters for producing an innovative codevector"; "a combiner circuit for combining said pitch codevector and said innovative codevector to thereby produce an excitation signal"; "a signal synthesis device including a linear prediction filter for filtering said excitation signal in relation to said linear prediction filter coefficients to thereby produce a synthesized wideband signal, and an oversampler responsive to said synthesized wideband signal for producing an over-sampled signal version of the synthesized wideband signal"; and "a high-frequency content recovering device comprising: i) a random noise generator for producing a noise sequence having a given spectrum; ii) a spectral shaping unit for shaping the spectrum of the noise sequence in relation to linear prediction filter coefficients related to said down-sampled wideband signal; and iii) a

signal injection circuit for injecting said spectrally-shaped noise sequence in said over-sampled synthesized signal version to thereby produce said full-spectrum synthesized wideband signal.” Further, the claims of the ’802 patent, including claim 1, are invalid under Section 112 for being indefinite because, for example and without limitation, the specification fails to disclose or sufficiently describe structure for performing several claim limitations that are governed by 35 U.S.C. § 112 ¶ 6, including for example, the claimed “a signal synthesis device including a linear prediction filter for filtering said excitation signal in relation to said linear prediction filter coefficients to thereby produce a synthesized wideband signal.”

33. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights as to whether the ’802 patent is invalid.

SEVENTH COUNTERCLAIM
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 7,260,521)

34. Apple restates and incorporates by reference its allegations in paragraphs 1 through 33 of its Counterclaims above, as if set forth fully herein.

35. An actual case or controversy exists between Apple and SLC as to whether the ’521 patent is not infringed by Apple.

36. Apple has not infringed and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the ’521 patent. By way of example and without limitation, Apple does not infringe at least claim 1 of the ’521 patent because none of the Apple accused products include “at least two signal paths associated to respective sets of pitch codebook parameters representative of said digitized input audio data, wherein: i) each signal path comprises a pitch prediction error calculating device for calculating a pitch prediction error of said pitch codevector from said pitch codebook search device,” as claimed.

37. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the '521 patent.

EIGHTH COUNTERCLAIM
(Declaratory Judgment of Invalidity of U.S. Patent No. 7,260,521)

38. Apple restates and incorporates by reference its allegations in paragraphs 1 through 37 of its Counterclaims above, as if set forth fully herein.

39. An actual case or controversy exists between Apple and SLC as to whether the '521 patent is invalid.

40. The claims of the '521 patent are invalid for failure to satisfy one or more of the requirements of 35 U.S.C. § 1 *et seq.*, including, but not limited to §§ 101, 102, 103, 112, and 132. By way of example and without limitation, U.S. Patent No. 7,767,119, and/or U.S. Patent No. 5,495,555 alone or in combination with other prior art, makes obvious the methods and systems claimed in the '521 patent by disclosing each of the claimed elements, including, for example and without limitation, “a pitch codebook search device configured to generate a pitch code vector based on a digitized input audio data, wherein said digitized input audio data represents an input audio signal that has been sampled and digitized”; “at least two signal paths associated to respective sets of pitch codebook parameters representative of said digitized input audio data, wherein: i) each signal path comprises a pitch prediction error calculating device for calculating a pitch prediction error of said pitch codevector from said pitch codebook search device; and ii) at least one of said at least two signal paths comprises a filter for filtering the pitch codevector before supplying said pitch codevector to the pitch prediction error calculating device of said at least one signal path”; and “a selector for comparing the pitch prediction errors calculated in said at least two signal paths, for choosing the signal path having the lowest calculated pitch prediction error and for selecting the set of pitch codebook parameters

associated to the chosen signal path.” Further, the claims of the ’521 patent, including claim 1, are invalid under Section 112 for being indefinite because, for example and without limitation, the specification fails to disclose or sufficiently describe structure for performing several claim limitations that are governed by 35 U.S.C. § 112 ¶ 6, including for example, the claimed “pitch prediction error calculating device for calculating a pitch prediction error of said pitch codevector from said pitch codebook search device.”

41. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights as to whether the ’521 patent is invalid.

NINTH COUNTERCLAIM
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 7,191,123)

42. Apple restates and incorporates by reference its allegations in paragraphs 1 through 41 of its Counterclaims above, as if set forth fully herein.

43. An actual case or controversy exists between Apple and SLC as to whether the ’123 patent is not infringed by Apple.

44. Apple has not infringed and does not infringe, literally or under the doctrine of equivalents, directly or indirectly, any valid and enforceable claim of the ’123 patent. By way of example and without limitation, Apple does not infringe at least claim 20 of the ’123 patent because none of the Apple accused products include a “device for producing a gain-smoothed codevector during decoding of an encoded wideband signal from a set of wideband signal encoding parameters” or “a codevector finder supplied with at least one first wideband signal encoding parameter of said set, and delivering a codevector found in relation to said at least one first wideband signal encoding parameter” as claimed.

45. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights regarding the ’123 patent.

TENTH COUNTERCLAIM
(Declaratory Judgment of Invalidity of U.S. Patent No. 7,191,123)

46. Apple restates and incorporates by reference its allegations in paragraphs 1 through 45 of its Counterclaims above, as if set forth fully herein.

47. An actual case or controversy exists between Apple and SLC as to whether the '123 patent is invalid.

48. The claims of the '123 patent are invalid for failure to satisfy one or more of the requirements of 35 U.S.C. § 1 *et seq.*, including, but not limited to §§ 101, 102, 103, 112, and 132. By way of example and without limitation, U.S. Patent No. 6,275,798, alone or in combination with other prior art, makes obvious the methods and systems claimed in the '123 patent by disclosing each of the claimed elements, including, for example and without limitation, “finding a codevector in relation to at least one first wideband signal encoding parameter of said set;” “calculating a first factor representative of voicing in the wideband signal in response to at least one second wideband signal encoding parameter of said set;” “calculating a second factor representative of stability of said wideband signal in response to at least one third wideband signal encoding parameter of said set;” “calculating a smoothing gain based on said first and second factors;” and “amplifying the found codevector with said smoothing gain to thereby produce said gain-smoothed codevector.” Further, the claims of the '123 patent, including claim 1, are invalid under Section 112 for being indefinite because, for example and without limitation, the specification fails to disclose or sufficiently describe structure for performing several claim limitations that are governed by 35 U.S.C. § 112 ¶ 6, including for example, the claimed “pitch prediction error calculating device for calculating a pitch prediction error of said pitch codevector from said pitch codebook search device.”

49. A judicial declaration is necessary and appropriate so that Apple may ascertain its rights as to whether the '123 patent is invalid.

PRAYER FOR RELIEF

WHEREFORE, Apple prays for judgment as follows:

- a. A judgment dismissing SLC's Complaint against Apple with prejudice;
- b. A judgment in favor of Apple on all of its Counterclaims;
- c. A declaration that Apple has not infringed, contributed to the infringement of, or induced others to infringe, either directly or indirectly, any valid claims of the '805, '524, '802, '521, and '123 patents;
- d. A declaration that the '805, '524, '802, '521, and '123 patents are invalid;
- e. An award to Apple of its fees and expenses of litigation;
- f. A judgment limiting or barring SLC's ability to enforce the '805, '524, '802, '521, and '123 patents in equity;
- g. Such other and further relief as this Court may deem just and proper.

DEMAND FOR JURY TRIAL

In accordance with Rule 38 of the Federal Rules of Civil Procedure and Local Rule CV-38, Apple respectfully demands a jury trial of all issues triable to a jury in this action.

Dated: June 20, 2016

Respectfully submitted,

/s/Melissa R. Smith

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**ATTORNEYS FOR DEFENDANT APPLE,
INC.**

CERTIFICATE OF SERVICE

The undersigned hereby certifies that counsel of record who are deemed to have consented to electronic services are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on this the 20th day of June, 2016.

/s/ Melissa R. Smith

Melissa R. Smith